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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,169	11/13/2001	Richard L. Segar	169.12-0502	7782

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SEAGATE TECHNOLOGY LLC  
INTELLECTUAL PROPERTY DEPT./ MAIL STOP NRW-097  
7801 COMPUTER AVENUE SOUTH  
BLOOMINGTON, MN 55435

EXAMINER
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MILLER, BRIAN E

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/010,169	SEGAR ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian E. Miller	2652	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 43-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 43-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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Claims 43-57 are now pending.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/5/06 has been entered.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the terms “device” and “holding member” as recited now in claims 52-57 lack proper antecedent basis within the original disclosure.

***Claim Objections***

3. Claims 53-57 are objected to because of the following informalities: (a) the phrase in the preamble “The device” should be changed to read “The actuation assembly” for consistency. Appropriate correction is required.

***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “slider bond pad for electrically

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connecting the slider to the gimbal”, as recited in claims 43 and 52, and “a gimbal that includes a flex on suspension bond pad”, as recited in claim 47, must be shown or the feature(s) canceled from the claim(s). It is noted that the gimbal is indicated as a separate element 28 in the disclosure, not being electrically connected to the slider in any way, nor including a bond pad, i.e., it is disclosed as a separate entity. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 52-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. (a) claim 52, last line, the word “the holding member” lacks proper antecedent basis.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

8. Claims 43, 47, 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Ainslie et al. (US 4,761,699). Ainslie et al disclose a slider device, as shown in at least FIGs. 4-7, including: a slider 16 having a leading edge and trailing edge 26, the trailing edge having a forward face; a slider bond pad 41/84 for electrically connecting the slider to a gimbal 40/flex on suspension (FOS) bond pad 47; a notch (or indentation) (unnumbered-though clearly shown) adjacent the forward face of the slider below the slider bond pad 41 and on an edge of the slider (shown in FIGs. 4-5 for example); wherein the notch and the slider bond pad are considered to “provide compensation for potential misalignment between the slider and the gimbal,” since this intended use language is not considered to encompass any claimed structural difference over Ainslie et al.

(As per claims 43 & 52) Ainslie et al is further considered to show that the bond pad 41/84 has at least two layers, i.e., the terminal pad 41 and solder layer 84, since the solder “balls” are formed during fabrication of the slider assembly (see col. 7, lines 1-6); as per claim 48, Ainslie et al is

considered to comprise a "pad extension" 41 adjacent the front side and a bond pad 84 adjacent the pad extension.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 44-46, 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ainslie et al. For a description of Ainslie et al, see the rejection, supra.

As per claims 44-46, with respect to the dimensional parameters of the notch/bond pad, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided such dimensions in the course of routine engineering optimization/experimentation. Moreover, absent a showing of criticality, i.e., unobvious or unexpected results, the relationships set forth in these claims is considered to be within the level of ordinary skill in the art. Additionally, the law is replete with cases in which the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

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It furthermore has been held in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range(s); see *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions; see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art. With respect to claims 55-57, as they have similar dimensional limitations as to claims 44-46, they are rejected under the same basis.

12. Claims 48-51, 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ainslie et al in view of Pihl (US 3,573,812).

With respect to claim 48-49 & 53-54, Ainslie et al remains silent as to the first layer (pad extension) 41 comprises nickel iron and the second layer (bond pad) comprises gold.

Pihl discloses an electrically conductive contact pad 82, which includes a nickel-iron alloy and a coating of gold. From this teaching of Pihl, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the Ni-Fe/gold laminate as taught by Pihl, onto the bonding pad/termination pad 41/84 of Ainslie et al. The motivation would have been: lacking any unobvious or unexpected results, as NiFe and gold are known to be a very good conductor(s) and contain corrosion-resistant properties, substituting one good conductor for another would have been readily realized by a skilled artisan.

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Further, with respect to claim 50, Ainslie shows a load beam 40 connected to the gimbal 43 (see also col. 8, lines 13-17), while the thickness of the slider bond pad being “about 15 microns” is considered obvious, as set forth in paragraph 11, *supra*.

### ***Response to Amendment***

13. Applicant's arguments filed 1/5/06 have been considered but are not persuasive.

A...Applicant generally states with respect to independent claim 43 (and similarly for claims 47 & 52) that Ainslie et al fail to teach or suggest a slider bond pad for electrically connecting the slider to the gimbal, the slider bond pad having at least two layers, and a ball bond for connecting the slider bond pad to the gimbal.”

These arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. It is the Examiner's position that these claim limitations do not overcome the prior art of record, as described in the respective rejections, *supra*.

### ***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Miller whose telephone number is (571) 272-7578. The examiner can normally be reached on M-TH 7:15am-4:45pm (and every other Friday).



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Brian E. Miller**  
**Primary Examiner**  
**Art Unit 2652**

BEM  
October 3, 2005